

REMARKS

Reconsideration of the application is respectfully requested for the following reasons:

1. Objections to Claims

The objections set forth in items 1—6 on pages 2-3 of the Official Action have been addressed by correcting the spellings of “colour,” “colours,” “minimise,” “minimising,” “characterising,” and “characterisation.”

2 Rejections Under 35 USC 112, 2nd Paragraph

Claims 19-36—Negative Limitation

This rejection is respectfully traversed on the grounds that:

- a. “generating a sub-pixel color **which cannot be obtained by a linear combination**. . .” is not a negative limitation;
- b. even if the generating step were a negative limitation, negative limitations are permitted so long as the metes and bounds of the limitation are clear; and
- c. the limitation has been re-worded to recite “generating a sub-pixel color **other than a color that can be obtained by a linear combination**,” which has exactly the same meaning as the original “negative” limitation, but does not use the word “cannot.”

According to the Office Action, the recitation: “generating a sub-pixel color which cannot be obtained by a linear combination of the sub-pixel colors of the other sub-pixel of the pixel” (in claims 19, 27, 34 and 36) “is a negative limitation that rendered the claim indefinite because it is an attempt to claim the invention by excluding what the inventors did not invent rather than distinctly and particularly pointing out what they did invent.” In reply, it is respectfully submitted that the limitation in question does not attempt to claim the invention by excluding what the inventors did not invent. To the contrary, the limitation in question is a “generating” step, which generates a certain type of pixel. This is a positive limitation and not a negative limitation, which in fact defines what the inventors did invent, namely only

generating sub-pixel colors that cannot be obtained by a linear combination of sub-pixel colors of another sub-pixel.

The positive nature of the limitation is evidenced by the fact that it can be re-worded, without changing its meaning at all, to eliminate the word “not.” There is no difference in meaning between “generating a sub-pixel color which **cannot** be obtained by a linear combination. . .” and “generating a sub-pixel color other than a color that **can** be obtained by a linear combination. . .” In either case, if the color can be obtained by a linear combination, it is not generated. If the color is other than that obtained by a linear combination, *i.e.*, a color that cannot be obtained by a linear combination, then it is generated. This recitation simply states the principle of an “orthogonal color system,” in which no two of the three sub-pixel colors can be combined to obtain the third. A common example, used in the specification of the present application, is the RGB (red, green, and blue), system

Even though the limitation has been re-worded to avoid giving the appearance of being a “negative” limitation, the Examiner is reminded that, as explained in M.P.E.P 2173.01 “Claim Terminology [R-2],” an “Applicant may use . . . negative limitations, or any style of expression or format of claim which makes clear the boundaries of the subject matter for which protection is sought. . . As noted by the court in *In re Swinehart*, 439 F.2d 210, 160 USPQ 226 (CCPA 1971), a claim may not be rejected solely because of the type of language used to define the subject matter for which patent protection is sought.” Even if the “generating” step were considered to be a negative limitation, the metes and bounds of the limitation are clear and definite. Withdrawal of the rejection of claims 19-36 on the grounds that they contain a “negative limitation” is therefore respectfully requested.

By using the limitation “generating a sub-pixel color which cannot be obtained by a linear combination of the sub-pixel colors of the other sub-pixel of the pixel”, the claim makes clear that the invention relates to so-called orthogonal color methods/systems, as e.g. an RGB-system in which no one of the basic colors Red, Green or Green, can be obtained by combining the two other colors.

Claims 19-26—Representation of Human Vision System/ Defect Characterization

The rejection in item 9 on page 4 of the Official Action has been addressed by:

- a. replacing “providing a representation of a human vision system by calculating an expected response of a human eye to a stimulus applied to a sub-pixel” in claim 19 with the limitation: “providing a **mathematical** representation of a human vision system by calculating an expected response of a human eye to a stimulus applied to a sub-pixel” and
- b. replacing “characterizing at least one defect sub-pixel present in the display” in claim 19 by the limitation: “characterizing **by using a vision measurement system**, at least one defect sub-pixel present in the display”.

The addition of the word “mathematical” to claim 19, which explains how the representation of the human vision system is provided (and how the expected response is calculated) in order to overcome the rejection, is supported by the description in **lines 18-20 on page 17 of the original specification**, and to **the formula on page 16, line 6** of the description, which gives an example (the PSF of the eye) of describing the image of a point source on the retina, which corresponds to the “expected response of a human eye to a stimulus applied to a sub-pixel”. Other examples can be found on page 14, lines 3-7 of the description.

The recitation in amended claim 19 of “characterizing **by using a vision measurement system**, at least one defect sub-pixel present in the display,” which explains how the defect sub-pixel is characterized in order to overcome the rejection, is supported by **lines 3-7 on page 25 of the original specification**.

By the addition of “by using a vision measurement system,” claim 19 now positively recites the means used in obtaining characteristics of a defect sub-pixel, which leads to the advantageous property that the characterization can be done at any moment, e.g. at the moment of fabrication of the display or even when operating it.

Claims 27-36--Characterization Data

This rejection has been addressed by changing the recitations in claims 27, 34, and 36 of “first characterization data for a human vision system” to the limitation: “first characterization data for a human vision system **describing the image of a point source on a retina of said human vision system.**” The amendment is supported by lines 9-10 on page 16 of the original description.

It is respectfully submitted that by specifying the kind of data as being the image of a point source on a retina of a human vision system, it becomes clear what kind of characterization is stored. In addition, it is respectfully noted as explained above that the second characterization can be done at any time, either at the moment of fabricating the display or while operating it, and therefore that there is no need to limit the claims to a particular moment that the second characterization data is obtained.

Having thus overcome each of the objections and rejections made in the Official Action, and in view of the indicated allowability of claims 19-36, withdrawal of the objections and rejections, and expedited passage of the application to issue is requested.

Respectfully submitted,

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